12 OCT 1977

MEMORANDUM FOR: Acting Deputy to the DCI for the Intelligence Community

25X1A

FROM: [redacted]
Director of Performance Evaluation and Improvement

SUBJECT: Assessment of CIA's Studies on the Prospects for Soviet Oil Production (U)

(U) The DCI has taken a very direct interest in the subject of the attached memorandum and has himself participated in a number of meetings with both the drafters of the CIA studies and with some of the critics. He will consequently already be familiar with much of the material. We believe, however, that the assessment will still be useful to him as a succinct statement of views on a complicated and controversial subject.

CPYRGHT

/s/

[redacted]

25X1A

Attachment:
As Stated

DOWNGRADED TO UNCLASSIFIED
UPON REMOVAL OF ATTACHMENT

SUBJECT: Assessment of CIA's Studies on the Prospects for Soviet Oil Production

Distribution:
Original - Addressee
25X1A 1 - SA/D/DCI/IC [redacted]
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1 - PAID/OPEI Subject
1 - IC Registry

25X1A 25X1 DCI/IC/OPEI/PAID/[redacted]bic [redacted](29Aug77)

DCI/IC 77-2351

14 OCT 1977

MEMORANDUM FOR: Director of Central Intelligence

FROM : John N. McMahon
Acting Deputy to the DCI for the
Intelligence Community

SUBJECT : Assessment of CIA's Studies on the Prospects
for Soviet Oil Production (U)

1. (U) Action Requested: None, for information only.

2. (U) Background: The attached assessment is a self-initiated Intelligence Community Staff effort to examine the validity of the CIA evaluation of Soviet oil prospects in the light of various criticisms leveled against it. You are already familiar with much of the material. We believe, nonetheless, that the assessment will be useful to you as a succinct statement of views on a complicated and controversial subject of continuing interest.

3. (C) The assessment concludes that, at least thus far, CIA's pessimistic forecast of Soviet oil prospects has not been effectively challenged. We understand that the Soviet leaders' own evaluation of their prospects is no more sanguine. DIA, however, is currently considering whether it will issue a detailed statement differing sharply with the CIA analysis.

John N. McMahon

Attachment:
As Stated

25X1

DCI/IC 77-2351

SUBJECT: Assessment of CIA's Studies on the Prospects for Soviet Oil Production (U)

Original - Addressee
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ASSESSMENT OF CIA's STUDIES OF THE

PROSPECTS FOR SOVIET OIL PRODUCTION

September 1977

SUMMARY

Purpose: This paper is an effort to examine the validity of the CIA assessment of Soviet oil prospects in the light of various criticisms leveled against it.

Analysis and Rebuttal: In a paper published in April 1977 on "The International Energy Situation: Outlook to 1985," CIA's Office of Economic Research (OER) included a brief section on Soviet and Eastern Europe oil prospects. Two additional papers analyzing the Soviet energy situation in detail were published in April and July. Departing from the conventional wisdom on this subject, CIA predicted Soviet oil production will soon peak; maximum production, once achieved, will not be long maintained; and the decline, when it comes, will be sharp. Even after taking into account the significant Soviet potential for alternative energy sources, the "Outlook" paper estimated that the Soviet Union and Eastern Europe will require imports of 3.5 to 4.5 million barrels of oil per day (b/d) by 1985. In subsequent briefings and written reports, CIA made it clear their import estimates assumed a continuation of present Soviet energy policies.

The most sustained attack by critics of the CIA analysis has centered on the import estimates. Soviet expert Marshall Goldman and others argue that the Soviet Union simply cannot afford to import oil and will take whatever steps are necessary to avoid it. Goldman and DIA also regard the CIA projections of Soviet production as too pessimistic. DIA does not differ so much with the conclusion that Soviet oil production will reach its peak level soon as with the view that maximum production will not be long maintained and the decline will be sharp.

Assessment: Only the passage of time will permit a definitive assessment of the validity of OER's analysis of Soviet oil prospects. As might be expected when the conventional view is challenged, the OER thesis has been received with skepticism in many quarters. In retrospect it would have allayed considerable criticism if some qualifications had been made in the original paper of the 3.5-4.5 million b/d import estimate. Clearly a continuing analytic effort, as new information becomes available, is required to test and retest the projections.

Yet up to the present, at least, OER's basic production estimates have not been effectively challenged. In any event, OER deserves credit for the planning and execution of a major analytic effort on a topic affecting the entire Soviet economy with important implications for U.S.-Soviet relations, as well as the world-wide energy outlook.

25X1

I. Introduction

In a column entitled "Oil and Credibility" (N.Y. Times, April 28, 1977, copy attached as Appendix A), economics professor and Soviet expert Marshall Goldman argues that it is vitally important that the President and his advisors not exaggerate the world-wide energy problem. "Unfortunately, Mr. Carter seems to have done just that when he cited the Central Intelligence Agency study of the demand and supply of energy in 1985. The general conclusion is not wrong, but parts of the analysis appear to be incorrect. This could affect the public's attitude toward the whole report's credibility." Goldman then cites CIA's estimate that the Soviet Union and Eastern Europe will need to import 3.5-4.5 million barrels of oil per day (b/d) by 1985 and centers his attack on this conclusion.

The purpose of this paper is to examine the validity of the criticisms by Goldman and others of the CIA assessment of Soviet oil prospects. The implications for the "credibility" of the Administration--and more specifically, of CIA--will also be touched upon briefly.

II. Background

From World War II until the present time, the Soviet record in oil production is impressive. Plan production goals were consistently met or exceeded up to 1970 and have lagged behind original output goals by only small percentages in recent years. Production in 1976 was 520 million tons (10.4 million barrels per day), nearly 14 times the output of 1950. From a relatively insignificant oil producer, the USSR has become the world's largest, exceeding the production of Saudi Arabia as well as the United States. This great increase, furthermore, was accomplished without anything like a commensurate rise in inputs.

It is generally recognized--and the Soviets themselves acknowledge--that the growth in Soviet oil production will be slower in the future and the costs considerably higher. Nonetheless, the conventional wisdom has assumed that further increases in Soviet production of oil, combined with a rapid increase in the production of natural gas, would be adequate to:

-- meet rising domestic needs;

-- continue to supply most of Eastern Europe's oil requirements;

-- permit the continuation of exports to hard currency countries at the rate of about 1 million b/d.

This view was reflected in most of the major world-wide energy supply and demand forecasts made during the six months before CIA published its energy outlook in April. A number of the forecasts (Walter Levy, International Energy Agency, EXXON, OECD) assume the Communist countries will be small net exporters to the West (approximately 1 million b/d). A Stanford Research Institute (SRI) study projects Communist country oil exports in 1985 of 4.5 million b/d, of which 2.4 million b/d is accounted for by China (most other forecasts concur with CIA's view that China will be a negligible exporter in 1985). One of the most impressive studies of world-wide energy prospects (Report of the Workshop on Alternative Energy Strategies) assumes the Communist countries will neither be exporting nor importing oil on a net basis in 1985. Only two reports (FEA and Citibank) forecast net oil imports by Communist countries in 1985 and the larger of these estimates was only 1.5 million b/d.

III. CIA's Blockbuster

In its overall assessment of the outlook for world energy up to 1985, CIA devoted only four brief paragraphs and one chart to the role of Communist countries in the world oil market. Yet this section--particularly its conclusion that the Soviet Union and Eastern Europe will have to import between 3.5 and 4.5 million b/d by 1985--appears to have been challenged more consistently than any other part of the CIA paper.

This is hardly surprising. CIA's conclusion that demand for OPEC oil will exceed OPEC's ability or willingness to produce by 1985 was, in other respects, in general agreement with the views of other industry and government forecasters. As previously indicated, however, CIA's estimate of prospects for Communist countries' oil trade with the West differs significantly from the other forecasts. If we take the figure of 1 million b/d as the consensus estimate for Communist countries' oil exports to the West in 1985, the CIA estimate suggests an additional demand for OPEC oil in the world market of 4.5 to 5.5 million b/d.

If CIA's estimate proves to be accurate, it will have serious implications for the West in terms of the supply and price of OPEC oil. The implications for the Soviet Union, however, are equally if not more serious.

IV. The CIA Assessment

A. International Energy Outlook

In "The International Energy Situation: Outlook to 1985" (April, 1977), CIA summarized Soviet and Eastern European oil prospects as follows:

> The Communist countries have been net exporters of about 1 million b/d of oil to the West. But the Soviet oil industry is in trouble. Soviet oil production will soon peak, possibly as early as next year and certainly not later than the early 1980s.
>
> The maximum level of output is likely to be between 11 and 12 million b/d--up from the 1976 level of 10 million b/d--but it is not likely to be long maintained, and the decline, when it comes, will be sharp. (A chart estimates production in 1985 between 8 and 10 million b/d.)
>
> Before 1985, the USSR probably will find itself not only unable to supply oil to Eastern Europe and the West on the present scale but also having to compete for OPEC oil for its own use. Although there will be some substitution of coal and gas for oil in domestic use, the scale of such substitution will be small before 1985. Neither hydroelectric power transmission from the East nor the construction of nuclear powerplants can afford much relief until well past 1985.
>
> We estimate that the Soviet Union and Eastern Europe will require a minimum of 3.5 million b/d of imported oil by 1985. At worst, slumping production could lead to import requirements as large as 4.5 million b/d.
>
> In China, the reserve and production outlook is much less favorable than it appeared a few years ago. We anticipate that growing domestic oil needs, resulting from economic growth and trouble with local production, will reduce oil exports to a negligible level by 1985. In 1980 exports will total no more than 500,000 b/d.
>
> In a supplementary publication, CIA estimated Soviet proved oil reserves are 30-35 billion barrels, roughly comparable with those of the United States.

B. Additional CIA Studies

The conclusions on Soviet prospects contained in the "Outlook" paper listed above were based on an Intelligence Memorandum (SECRET) of March, 1977, entitled "The Impending Soviet Oil Crisis." This paper was published in unclassified form in late April under the title, "Prospects for Soviet Oil Production." A second unclassified paper was published in July, entitled, "Prospects for Soviet Oil Production--A Supplemental Analysis." Although these papers suggested the possibility of future net imports by the USSR and Eastern Europe, they did not project imports of 3.5-4.5 million b/d in 1985, as in the "Outlook" paper.

Finally, CIA produced a paper "Soviet Economic Problems and Prospects" (SECRET), in July 1977, which assesses the implications of Soviet energy and other problems on economic growth and outlines the options open to economic policymakers. An unclassified version was issued in August.

V. Overcoming the Doubters

CIA has been remarkably successful in overcoming most of the public criticisms of its Soviet oil assessment. One of its most effective techniques has been to invite its critics to come in and talk it over. If not entirely persuaded, the critics thereafter muted their disagreement. The Agency has also held a number of briefings for government officials, congressmen, businessmen and academics. 25X1A

[redacted]

In mid-June, CIA conducted a seminar at State on the long-run demand for OPEC oil. All departments and agencies of the USG with an interest in energy were represented, including a number at the Deputy Assistant Secretary level. Somewhat surprisingly, no one (not even DIA on this occasion) challenged the Agency's Soviet projections. A CIA spokesman's comment that Agency projections of net Communist oil imports in 1985 of 3.5-4.5 million b/d was, of course, based on a continuation of present Soviet policies may have diffused one line of questioning.

VI. The Critics Corner

A. Marshall Goldman

Among its public critics, Marshall Goldman appears to be the most vocal in continuing to disagree with important elements of the CIA analysis (see letter at Appendix A). The points of difference came out most clearly 29 June, when a virtual debate took place between CIA representatives and Goldman before the Commerce Department's Advisory Committee on East-West Trade, a group which includes businessmen, bankers, and academics.

Goldman acknowledged that the CIA studies of Soviet oil prospects show evidence of careful research but questioned the practical results. He maintained that:

-- The CIA analysts disagree among themselves, as revealed by the differences in the published studies. Thus, in the "Outlook" paper, the estimate is that the Soviet Union and Eastern Europe will require a minimum of 3.5-4.5 million b/d of imported oil in 1985. These import figures are not repeated in the "Prospects" paper, which states that "at a minimum, the USSR will find it difficult to continue to simultaneously meet its own requirements and those of Eastern Europe while exporting to non-Communist countries on the present scale. More pessimistically, the USSR will itself become an oil importer." (NOTE: A careful reading of the two statements does not indicate they are necessarily inconsistent, although the net impression is quite different.)

-- The Soviet Union cannot afford to become an oil importer in 1985. Oil imports of 3.5-4.5 million b/d would cost $12-15 billion in hard currency, assuming no change in world prices. In contrast, the USSR currently depends on oil exports for 45-50 percent of its foreign exchange earnings.

-- World oil prices are likely to continue to rise, thereby further encouraging Soviet production and export as well as the curbing of domestic consumption.

-- The CIA report underestimates the Soviet capacity to step up off-shore drilling for oil, as well as their capability for substituting natural gas, coal and nuclear power for oil to whatever extent should become necessary.

-- If imports of better pumps and drilling equipment will meet Soviet oil production problems, as the CIA report suggests, the difficulty of obtaining them seems to be exaggerated. American manufacturers are anxious to sell such equipment and it is in the US interest to assist the Soviet oil industry at this time.

B. DIA

Within the Intelligence Community, the only dissent from CIA's findings comes from DIA. In a NID article of 9 May:

> "DIA estimates that Soviet recoverable oil reserves are larger (85 billion barrels) than CIA's (35 billion barrels). These reserves, if supplemented by escalated exploration and drilling, should enable the Soviets to remain oil exporters through 1985."

More recently, the NID of 1 July carried another DIA dissent:

> "DIA believes that the decline in Soviet oil production will not be as rapid as indicated in this article and that the Soviets probably will maintain production at current or higher levels into the 1980s."

Irked by these views, CIA recently sent DIA a "put up or shut up" letter, attached as Appendix B. DIA expects to respond but has not yet done so. Based on discussions with DIA, it seems likely DIA will include at least some of the following points in its response:

-- If CIA had labeled its assessment of Soviet oil prospects a "worst case" scenario, there would be no grounds for disagreement.

-- DIA does not seriously disagree with CIA's view that Soviet production may peak around 12 million b/d, possibly as early as next year. DIA would estimate maximum production a little higher, closer to 13 million b/d than 12.

-- DIA differs with the CIA view that peak production "is not likely to be long maintained, and the decline, when it comes, will be sharp," resulting in production in 1985 of between 8 and 10 million b/d. Instead, DIA estimates a leveling of production once the peak is reached, with the result that production in 1985 would be between 12 and 13 million b/d.

-- The CIA exaggerates the water lift problem at the giant Samotlor field in western Siberia. The CIA view that this field will peak in the next year or so and hold peak levels for no more than four years is unduly pessimistic.

C. International Trade Commission

In a study entitled "Factors Affecting World Petroleum Prices to 1985," published in September 1977, the ITC concluded that, between now and 1985, the USSR--and the Communist bloc--will remain self-sufficient in crude petroleum production. The study forecasts Soviet output of 12 million b/d in 1980--not much different than CIA's estimate--but foresees a further gradual buildup of production by 1985. Thus Soviet output in 1985 is estimated at 14 million b/d, or 4 to 6 million b/d over CIA's forecast.

The authors of the ITC study acknowledge, however, that their analysis "relies on published forecasts and sources of historical data, rather than generating new data and techniques." These sources were unclassified. In their assessment of oil prospects for the Communist countries, they make no claim to have attempted original research and have chosen to support the conventional wisdom on the Soviet Union in preference to CIA's view. Thus, referring to CIA's claim that Soviet crude petroleum production will suffer from water encroachment, the ITC study notes that "CIA's pessimistic assumption, however, has appeared in no other major study of the world petroleum situation." It should also be noted that the extensive bibliography attached to the ITC report includes CIA's April "Outlook" study, but fails to list additional unclassified CIA studies of Soviet oil prospects published in April and July.

At one point the ITC study somewhat obliquely recognizes the possibility that the CIA analysis could prove to be correct. The study states that "assuming that the eastern Siberian fields are developed rather intensively and that the western fields continue to produce, production in 1985 could average as much as 20 million b/d. If either assumption is not attained (sic) this figure is optimistic; and if both assumptions fail it is quite possible the USSR will be a net importer." This gets to the heart of the matter since CIA maintains that both assumptions are invalid.

VII. CIA Response

CIA (OER) has what appear to be convincing answers to most of the questions raised by its critics. Its response to Dr. Goldman runs along the following lines:

-- The CIA analysis of Soviet oil production problems and prospects is largely based on published Soviet sources and any analyst who might care to retrace the Agency's footsteps would likely come to the same conclusions.

-- While inevitably CIA analysts have differences among themselves on minor points, they are unanimous in their belief that Soviet oil production is going to peak, perhaps as early as next year but certainly by the early 1980s.

-- CIA now says that it does not disagree with Goldman and other critics who assert the USSR will be unable to afford an import requirement of 3.5-4.5 million b/d in 1985. A recently published Agency analysis stated that the differences between selling 1 million b/d (as in 1976) and buying 2.7 million b/d (the projection for 1985 that assumes no unusual conservation efforts and which is consistent with the earlier import estimate if Romania and Yugoslavia are not included as Soviet energy clients) is $17 billion in 1977 prices, more than the USSR's total 1976 hard currency imports. To offset such a shift by increasing non-oil exports would be an impossible task.

-- Offshore oil production in the Soviet Arctic areas is at least 10-15 years away and will require Western technology. Developments in the Black and Caspian seas are not likely to change the picture significantly, although some increase in Caspian production may be possible about the mid-1980s.

-- While there will be some substitution of coal and natural gas for oil in domestic use, and some increased exports of gas, the scale of such substitution will be small before 1985. Admittedly the reserves of both coal and gas are large but are located mainly east of the Urals far from industrial centers. The production and transportation problems are great. The cost of transporting equivalent amounts of energy, for example, are four times as much for natural gas as for oil.

-- A program for constructing nuclear power plants is underway but nuclear power will constitute only about two percent of national energy production in 1985.

-- The need for Western technology to help solve their oil problem is demonstrated by the fact that Soviet orders for Western oil and gas equipment increased from $500 million in 1975 to $1.6 billion in 1976. Imported equipment is available only in limited quantities, however, and can only slow the rate of decline in oil production once it begins.

On its differences with DIA, CIA makes the following points:

-- The extent of Soviet reserves is largely a matter of definition. It acknowledges the USSR has abundant potential reserves in Artic, East Siberian, and offshore areas, and that new discoveries will eventually be made. The development of such reserves, however, is at least a decade away and during the next 8-10 years almost all Soviet output will have to come from existing fields and from new fields in regions now producing. 25X1C

[redacted] 25X6

[redacted]

VIII. Assessment

Only the passage of time, of course, will permit the validity of OER's analysis of Soviet oil prospects to be accurately assessed. More importantly, OER deserves credit for the planning and execution of a major analytic effort on a topic of major interest affecting the entire Soviet economy. The results of this research, when combined with other more apparent factors in the economy pointing toward a slowing down of the rate of growth, have permitted an assessment of overall Soviet economic prospects which suggests serious problems ahead for Moscow. The prospect of reduced economic growth over the next decade, documented in impressive detail in the recently published study, is expected to impinge heavily on traditional Soviet objectives in the fields of defense, foreign policy, industrial investment and consumer interests.

In retrospect, it appears that CIA erred in one respect with the inclusion of a flat unqualified statement* in the "Outlook" paper that the Soviet Union and Eastern Europe would be large net importers in 1985. Subsequently, OER spokesmen argued that it was clear from the context that the rule of "ceteris paribus" was implied. They contend, furthermore, that they fully recognized that the Soviet Union would search for alternatives when it realized a continuation of present policies would force it to become an oil importer. Subsequently published studies, they point out, made this clear. While this may all be so, it would have prevented considerable confusion--and some (perhaps temporary) loss of credibility--if these points had been made explicitly in the original paper.

Nonetheless, despite his continued disagreement with parts of the CIA analysis, Goldman went out of his way at the Commerce meeting to commend CIA both for the thoroughness of its research efforts and for the decision to make the studies a matter of public record. If Goldman still held to the view expressed in his April _Times_ article that CIA was risking its (and the Administration's) credibility, he kept it well disguised.

The possibility that the Warsaw Pact countries--and even the Soviet Union itself--might become net oil importers in the mid-1980s further strengthens the need of the West to reduce its dependence on OPEC oil. It is probably all to the good that the public should be made aware of the possibility of this additional competitive demand on OPEC production. On balance, OER's analysis of Soviet oil prospects and the publication of the results in a series of documents have been in the national interest and the interests of the Intelligence Community.

*"We estimate that the Soviet Union and Eastern Europe will require a minimum of 3.5 million b/d of imported oil by 1985. At worst, slumping production could lead to import requirements as large as 4.5 billion b/d."

Appendix A
Marshall I. Goldman article

Appendix B

25X1A

NY T 4.29.77

Oil and Credibility

By Marshall I. Goldman

CAMBRIDGE, Mass.—President Carter's call for energy conservation comes none too early. While some may argue whether it will be 1983 or 1987 when petroleum demand exceeds supply, most authorities agree that if demand continues to grow there will indeed be a shortage.

Despite agreement over the ultimate conclusion, there is a good deal of public skepticism about the actual dimensions of the problem. Because of past warnings that occasionally have proved to be premature or false, it is vitally important that the President and his advisers not exaggerate. Unfortunately, Mr. Carter seems to have done just that when he cited the Central Intelligence Agency study of the demand and supply of energy in 1985. The general conclusion is not wrong, but parts of the analysis appear to be incorrect. They could affect the public's attitude towards the whole report's credibility.

In particular, the report predicts that by 1985 the Soviet Union and Eastern Europe will need to import 3.5 million to 4.5 million barrels of oil a day and that this will intensify demand pressures on the rest of us.

Predicting Soviet oil output by 1985 is risky. Estimates of Soviet petroleum reserves are a state secret. Consequently, foreigners can only guess about Soviet production potential by projecting what comparable geological formations elsewhere in the world would yield. Such estimates vary widely, but 81 billion barrels is a plausible guess. If correct, that means the Russians have the potential not only to maintain their existing output but to fulfill their target for 1980, which calls for an increase in output of 5.4 percent a year.

Output in several Soviet oil fields in 1976 was less than that of 1975, but output from the gigantic Tyumen fields in western Siberia more than made up for that. The C.I.A. assumes that the Tyumen fields cannot continue to provide such large-scale increments in output yearly. However, the Russians have indicated that there are potentially rich deposits elsewhere and in other geological strata. Moreover, the Russians have not, until now, been particularly efficient in oil recovery and offshore drilling—other possible means of increased output. For this reason, they are now turning actively to the West for technical help.

The C.I.A. and others have been predicting since at least 1970 a cutback in output and export of Soviet petroleum. Such estimates might well have proved correct if prices had not soared in 1973. But an increase in prices serves to make economically feasible what before was considered unprofitable. Certainly, if the C.I.A.'s predictions about shortages elsewhere in the world prove to be correct, there is likely to be another significant price increase ahead. This will mean that the Russians will have added incentive not only to work deposits that might now be unprofitable but to curb domestic consumption in order to take advantage of the higher world prices.

The Russians and even the East Europeans have some leeway to do this since the Soviet Union has coal and unusually large deposits of natural gas it can substitute. It can also increase its use of nuclear power.

The Soviet Union not only has the incentive to conserve in order to divert petroleum to this high-priced market, but will be sorely pressed if it has to import. The C.I.A. scenario implies that the Soviet Union will not be able to export petroleum. However, since petroleum exports in 1976 accounted for about 50 percent of the Soviet Union's hard-currency earnings, it is hard to see where the Soviet Union will find the wherewithal to import, particularly if the real price of petroleum continues to climb.

The C.I.A. is saying, therefore, that not only will the Soviet Union and its allies have to import 3.5 to 4.5 million barrels a day, but because it will not be able to export its current one million barrels a day to hard-currency countries, the overall impact on the world market will be a drain of 4.5 to 5.5 million barrels a day. This, in turn, seems to imply that the Soviet five-year-plan target for 1980 of 12.8 million barrels a day will not be fulfilled and that such production cannot be sustained into 1985.

So far, however, the Russians are keeping up with their targets. Even if they produce no more in 1985 than they project for 1980, that should still be enough to allow them and their allies to increase theid consumption by 50 percent a year for the next eight years, sustained by only one million barrels a day of imports. Even then, this implies not only no curbing of domestic demand and no new significant oil discoveries, but an abundance of hard currency to pay for the higher-priced world petroleum of 1985.

Again, the issue is not whether the Soviet Union will ever run out of petroleum—it will, but it will take much longer than the C.I.A. says before the Soviet Union becomes the cause of the tightened market.

Marshall I. Goldman is professor of economics at Wellesley College and associate director of Harvard's Russian Research Center.

CENTRAL INTELLIGENCE AGENCY
WASHINGTON, D.C. 20505

25X1

19 July 1977

MEMORANDUM FOR: [redacted] 25X1A
Petroleum Section DB-4F2
Defense Intelligence Agency

SUBJECT : Differences in CIA/DIA Appraisal of the Soviet Oil Situation

1. The DCI has noted that on several occasions in recent months, there have been differences in the way that CIA and DIA assess the Soviet oil situation. These differences have surfaced in a number of current intelligence articles. An article by CIA analysts entitled "USSR: Impending Oil Production Crisis" that appeared in the Weekly Review of April 8th carried the following DIA dissent:

> "The DIA estimates that the Soviet proven reserves are in the range of 85 billion barrels and therefore cannot agree with the immediacy of an oil crisis in the USSR as implied throughout this paper."

A similar statement was contained in an article "USSR: Natural Gas Prospects" that appeared in the National Ingelligence Daily of May 9th:

> "DIA estimates that Soviet recoverable oil reserves are larger (85 billion barrels) than does CIA (35 billion barrels). These reserves, if supplemented by escalated exploration and drilling, should enable the Soviets to remain oil exporters through 1985."

More recently, in "USSR: Bleak Economic Prospects", NID of 1 July:

25X1

[redacted]

CONFIDENTIAL

20 JUL 1977

"DIA believes that the decline in Soviet oil production will not be as rapid as indicated in this article and that the Soviets probably will maintain production at current or higher levels into the 1980s."

2. From our recent telephone conversation I gather that the CIA/DIA differences involve mainly:

a. the magnitude of Soviet oil reserves,

b. the probable timing of a peaking of Soviet oil production, and

c. the ability of the Soviet oil industry to cope with the drilling and fluid lifting problems confronting it.

3. The differences with respect to reserves probably are largely definitional. No one in the West knows for sure the exact size of Soviet oil reserves, which have been a state secret since World War II. The CIA estimate of 30-35 billion barrels attempts to approximate as nearly as possible the fairly restrictive US definition of proved reserves. The higher level of Soviet reserves that DIA accepts is one that we could agree with under a concept that would include proved, probable, and an optimistic estimate of possible reserves. We do not doubt that the USSR has abundant potential reserves in Arctic, East Siberian, and offshore areas, or that new discoveries, some of them quite large, will eventually be made. However, we believe that development of such reserves is at least a decade away, and that during the next 8-10 years almost all Soviet output will have to come from existing fields and from new fields in regions now producing. Unless large new deposits are found soon, in fairly accessible locations, the discoveries will be too late to alleviate the Soviet problem within the time frame we have been discussing.

4. Because we believe that time is running out for the Soviet petroleum industry, the differences concerning production capability seem more important than those concerning ultimately recoverable Soviet reserves. The extent of disagreement on production, however, is not clear. DIA's comment in the NID of July 1st apparently accepts the idea that there will be a decline in Soviet production, but does not specify when the down-turn will occur. It does say that the USSR probably will maintain production at current or

higher levels "into the 1980s". How different this is from the CIA position depends on how far "into the 1980s" DIA anticipates maintenance of current production levels.

5. The time at which Soviet oil problems will become acute is, of course, difficult to predict precisely. We believe, however, that Soviet oil production will peak at some time in the next few years, perhaps as early as next year, and almost certainly not later than the early 1980s. The maximum output reached is likely to be between 11 and 12 million barrels per day, and this level probably will not be maintained for long. The initial falloff, when it comes, will almost certainly be sharp. Thereafter, output may continue to fall sharply, level off, or perhaps even increase as new fields are brought into production in frontier areas. Given the rapid rate of depletion of existing fields and the technical difficulties associated with exploration and exploitation in frontier areas, we doubt that new discoveries will come on stream rapidly enough to do more than temporarily arrest the rapid slide of Soviet output.

6. We seriously doubt that the USSR can achieve the 1980 production goal of 640 million tons (12.8 million barrels per day). How much short it will be will largely depend on the rate of water incursion, on Soviet ability to cope with the necessity to lift large volumes of fluid (oil plus water), and on Soviet ability to carry out the necessary drilling.

7. The CIA position has been set forth in some detail in:

> ER 77-10147, "The Impending Soviet Oil Crisis", March 1977, S.
>
> ER 77-10270, "Prospects for Soviet Oil Production", April 1977, U.
>
> ER 77-10425, "Prospects for Soviet Oil Production, A Supplemental Analysis", July 1977, U.

In the interest of achieving a more unified, and hopefully improved, Intelligence Community position on these matters we would welcome receipt of a more detailed discussion of the DIA position than has been available to us thus far. We would be especially glad to receive a more detailed discussion of DIA's views on Soviet production capability.

New data, or new analytical insights and interpretation of old data, would be most helpful, as would direct consultation once we have had opportunity to study and understand the basic DIA position. Such an exchange might reveal that the differences between us are less meaningful than they now appear. Should this not prove to be the case, then CIA and DIA would both have a better understanding of the reasons we differ. This would at least greatly facilitate our ability to respond to inquiries from the Director of Central Intelligence concerning Community positions on the Soviet oil situation.

25X1A

[redacted]

Chief, Resources Branch
USSR/Eastern Europe Division
Office of Economic Research

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